

**NATURAL RESOURCE CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

BRUSH MANAGEMENT

(Acre)

CODE 314

DEFINITION

Removal, reduction, or manipulation of non-herbaceous plants.

PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

- Restore natural plant community balance.
- Create the desired plant community.
- Reduce competition for space, moisture, and sunlight between desired and unwanted plants.
- Manage noxious woody plants.
- Restore desired vegetative cover to protect soils, control erosion, reduce sediment, improve water quality and enhance stream flow.
- Maintain or enhance wildlife habitat including that associated with threatened and endangered species.
- Improve forage accessibility, quality, and quantity for livestock.
- Protect life and property from wildfire hazards.
- Improve visibility and access for handling livestock.

CONDITIONS WHERE PRACTICE APPLIES

On rangeland, native or naturalized pasture, pasture, and hayland where removal or reduction of excessive non-herbaceous plants is desired.

CRITERIA

General Criteria Applicable for All Purposes

Brush management will be designed to achieve the desired plant community in woody plant density, canopy cover, or height.

Brush management will be applied in a manner to achieve the desired control of the target woody species and protection of desired species. The following methods or combination of methods will accomplish brush management:

- Mechanical treatments
- Chemical treatments
- Biological treatments
- Prescribed burning

[Prescribed Grazing \(528\)](#) shall be applied to ensure desired response from treatments used on grazing lands.

Additional Criteria for Improving Wildlife Habitat

Brush management will be planned and applied in a manner to meet the habitat requirements of the wildlife of concern. Refer to Wildlife Habitat Evaluation Worksheets ([NE-CPA-32](#), [CPA-33](#), [CPA-34](#), [CPA-35](#), and [CPA-](#)

BRUSH MANAGEMENT (314)-2

[36\)](#) Appraisal Guides for the landuse and species of concern.

Brush management will be planned in a manner that it will not adversely affect threatened or endangered species (plant, or animal) or their habitats

Additional Criteria for Reducing Wildfire Hazards

Control undesirable woody plants in a manner that creates the desired plant community, which reduces wildfire hazard conditions.

If brush management practices result in large amounts of downed debris in sensitive locations that would contribute to wildfire intensity or hazard, removal should be recommended. Refer to [Firebreak \(394\)](#) standard for recommended protection procedures.

Additional Criteria for Consideration of Cultural Resources and Cultural Values

Cultural resources will be considered when planning this practice. This practice has the potential for adversely affecting cultural resources and compliance with GM 420; Part 401 during the planning process is necessary.

Local cultural values will be incorporated into the practice design in a technically sound manner where appropriate.

Compliance with all applicable federal, state and local laws and regulations, including permits, permissions, or notifications is required.

CONSIDERATIONS

Grazing Considerations

Timing and sequence of brush management in a pasture and/or the entire operating unit should be planned in coordination with a grazing management plan.

Soil Erosion Considerations

Consider soil erosion potential and difficulty of vegetation establishment when choosing a method of control that causes soil disturbance.

Mechanical brush management operations and prescribed burning should be timed to prevent exposure of bare soil for undue periods of time to reduce wind and water erosion and subsequent movement of sediment into ponds, streams, and reservoirs.

Areas of critical wildlife habitat will be inventoried and land-owners will be encouraged to exclude them from the treatment area, such as:

- Areas on steep escarpments, ravines, rocky hillsides, and other rough formations
- Tree-lined drainways

Beautification and Recreation Considerations

Limit brush control measures to thinning or selective control on areas which have value or potential value for development of recreation areas, homesteads, or scenic beauty. Such areas generally occur near lakes, rivers, or major streams and along highway and scenic roadways. Determine the kind and amount of trees and shrubs to be left for use prior to implementing control measures.

Woodland Considerations

Sites containing commercially important tree species will be identified and excluded from treatment areas.

Guidance on woodland considerations will be addressed in [Brush Management Design Procedures \(314DP\)](#).

PLANS AND SPECIFICATIONS

Plans and design procedures will be prepared for each pasture, field, or management unit where brush management will be applied .

Plans and specifications will be based on the practice standard and may include narratives, maps, drawings, job sheets, or similar documents. These documents will contain the following data as a minimum:

- 1) Brush canopy and/or species count; transect line locations and percent canopy and/or species numbers per acre of the target plant(s).
- 2) As needed, maps or drawings showing areas to be treated and areas to be left undisturbed.
- 3) For mechanical treatment methods, planning will include types of equipment and any modifications necessary to enable the equipment to adequately complete the job.

MECHANICAL TREATMENT

For mechanical treatment methods, plans and specifications will include types of equipment and any modifications necessary to enable the equipment to adequately complete the job. Also included should be:

- Dates of treatment
- Operating instructions
- Techniques or procedures to be followed

CHEMICAL TREATMENT

For chemical treatment methods, plans and specifications will include:

- Special precautions to avoid damaging non-target species (such as chemical treatments that can affect nearby desirable trees, cause off-site damage, etc.)
- Refer to the current "[Guide for Weed Management in Nebraska](http://www.ianr.unl.edu/pubs/fieldcrops/ec130.html)". The weed management guide can be found at: <http://www.ianr.unl.edu/pubs/fieldcrops/ec130.html>
- Reference to the current label instructions
- Herbicide type (active ingredient)
- Rate of application or spray volumes
- Acceptable dates or vegetative state/condition necessary for application

- Mixing instructions (if applicable)
- Documentation of the use of environmental analysis tools (such as WIN-PST, Soil Pesticide Interaction Loss Potential and Hazard Rating Report) in formulating alternatives with the client.
- Any special application techniques, timing considerations, or other factors that must be considered to ensure the safest, most effective application of the herbicide.

BIOLOGICAL TREATMENT

For biological treatment methods, plans and specifications will include:

- Type of biological treatment, such as grazing animals or insects to be used
- Timing, duration, and intensity of grazing or browsing
- Desired degree of grazing or browsing use for effective control of target species
- Maximum allowable degree of use on desirable non-target species
- Special precautions or requirements when using insects or grazing animals as biological treatments

PRESCRIBED BURNING TREATMENT

- Refer to Prescribed Burning (338) for guidance

OPERATION AND MAINTENANCE

Operation: Brush management practices shall be applied using approved materials and procedures. Operations will comply with all local, state, and federal laws and ordinances.

Success of the practice shall be determined by evaluating regrowth or reoccurrence of target species after sufficient time has passed to monitor the situation and gather reliable data. Evaluation periods will depend on the methods and materials used.

BRUSH MANAGEMENT (314)-4

Maintenance: Following initial application of the control method, some regrowth, resprouting, or reoccurrence of brush should be expected. Spot treatment (chemical) of individual plants or areas needing retreatment should be done as needed. Follow-up treatments using a combination of control

methods or using a different control method than the initial treatment (mechanical, chemical, biological and/or prescribed burning) may be needed to maintain desired control.